## IN THE CLAIMS:

## Listing of the Claims:

- (allowed) A method for assessing the risk of transplantation rejection in a recipient host comprising the following steps:
  - (a) determining the HLA-DR of the recipient and the HLA-DR of a donor and determining if the recipient and donor are DR mismatched;
  - (b) assaying for the presence of activated T-lymphocytes in the recipient;
  - (c) assaying for the presence of circulating IgG anti-HLA Class II antibodies in the serum of the recipient; wherein the presence of activated T-lymphocytes in the recipient and the presence of circulating IgG anti-HLA Class II antibodies in a DR mismatched recipient indicates a high risk of transplantation rejection.
  - (allowed) The method of claim 1 wherein the recipient host has received a tissue allograft.
  - (allowed) The method of claim 1 wherein the recipient host has received a heart transplant.

- 4. (allowed) The method of claim 1 wherein the HLA-DR of the recipient is determined using a microcytotoxicity assay.
- 5. (allowed) The method of claim 1 wherein the HLA-DR of the recipient is determined using a mixed lymphocyte reaction.
- 6. (allowed) The method of claim 1 wherein the HLA-DR of the recipient is determined using a polymerase chain reaction.
- 7. (allowed) The method of claim 1 wherein the presence of antigen activated lymphocytes is measured using a lymphocyte growth assay.

Claims 8-18 (withdrawn).

19. (rejected) A method for predicting whether or not a transplant post-transplant recipient is likely to reject a tissue allograft comprising detection of IgG anti-HLA DR antibodies in the serum of the transplant post-transplant recipient against a panel of control B lymphocytes wherein detection of such antibodies indicates that the transplant post-transplant recipient is likely to reject a tissue allograft.

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